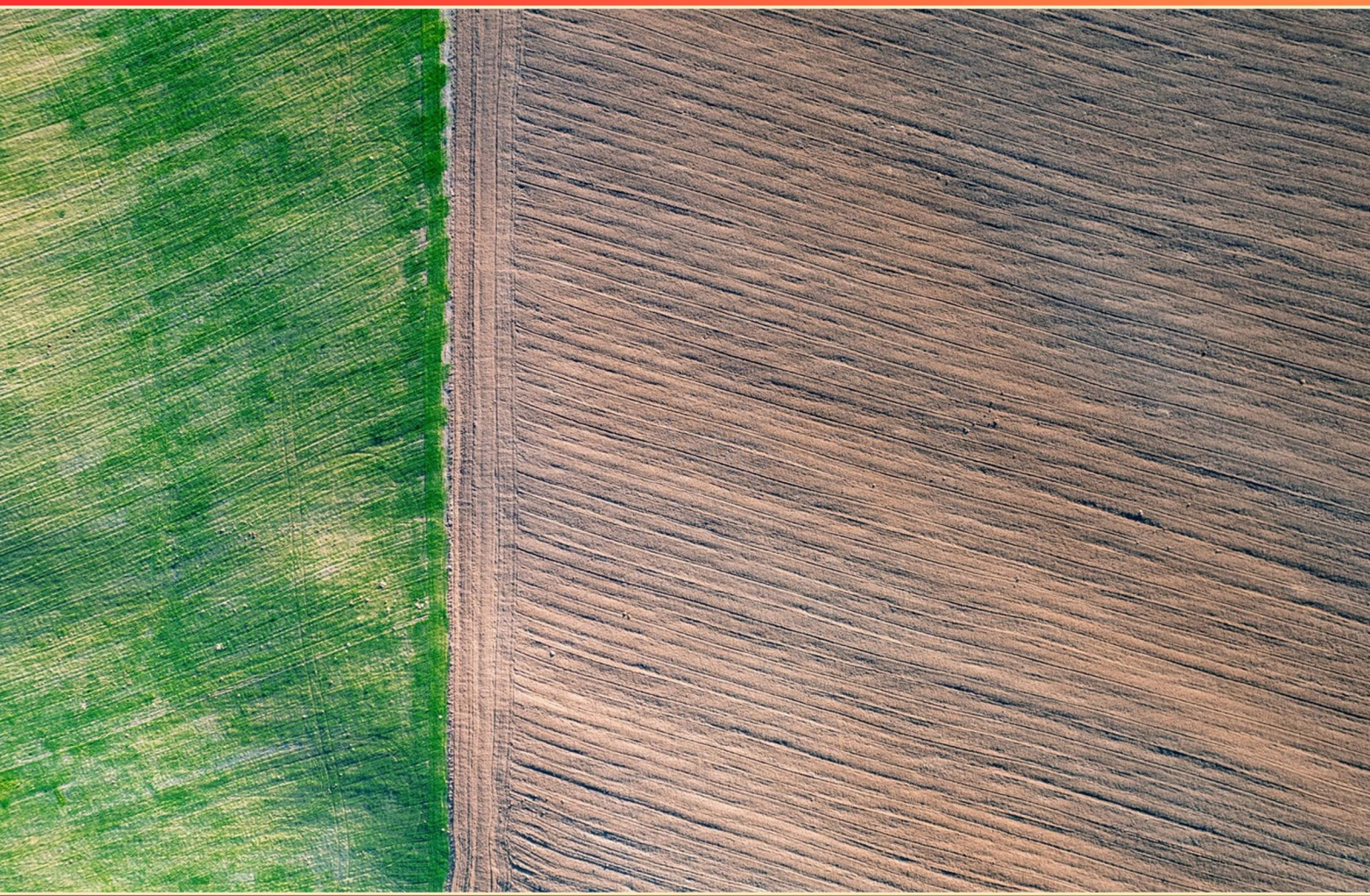
FUTURE FARMERS OF AMERICA (FFA) AGRONOMY CAREER DEVELOPMENT EVENTS (CDE) PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://ffa-agronomy-cde.examzify.com

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 16

SAMPLE

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

SAMPLE

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

SAMPLE

Questions

SAMPLE

1. What is the primary use of the Sprayer equipment in agriculture?

A. Fertilizing soil

B. Harvesting crops

C. Spraying chemicals on crops

D. Planting seeds

2. What defines a Tractor in agricultural use?

A. A vehicle used for transporting crops

B. A motor vehicle with large rear wheels for hauling equipment

C. A device for planting seeds

D. A machine for processing produce

3. Iron chlorosis in plants is characterized by what visible symptom?

A. Leaf curling

B. Yellowing of plant leaves

C. Root decay

D. Excessive leaf growth

4. What does the term "banding" refer to in agronomy?

A. Applying fertilizers broadcast across the field

B. Applying fertilizers in a narrow, concentrated band

C. Applying fertilizers mixed with soil

D. Applying fertilizers as a foliar spray

5. What economic impact is commonly associated with the Tomato Hornworm larva?

A. Destruction of roots

B. Destruction of vegetative parts

C. Destruction of soil

D. Destruction of seeds

SAMPLE

6. How many pounds of phosphorus per acre will you add if you apply 40 pounds of diammonium phosphate per acre?

A. 15.0 pounds

B. 18.4 pounds

C. 20.4 pounds

D. 25.0 pounds

7. What is a primary characteristic of stalk rots in corn?

A. Yellowing of leaves

B. Dark brown lesions on nodes

C. Complete loss of roots

D. Fungal growth on the ears

8. What distinguishes indeterminate plants from determinate plants in terms of seed maturation?

A. Seeds mature at different times

B. All seeds mature simultaneously

C. Only some seeds mature

D. Seeds drop at the same time

9. What is the guaranteed analysis for disammonium phosphate?

A. 20-10-10

B. 0-0-60

C. 18-46-0

D. 10-30-10

10. What visual characteristic is associated with root rot?

A. Plants growing excessively

B. Dead and decayed roots

C. Bright green foliage

D. Large flower blooms

SAMPLE

Answers

SAMPLE

1. C
2. B
3. B
4. B
5. B
6. B
7. B
8. A
9. C
10. B

SAMPLE

Explanations

SAMPLE

1. What is the primary use of the Sprayer equipment in agriculture?

A. Fertilizing soil

B. Harvesting crops

C. Spraying chemicals on crops

D. Planting seeds

The primary use of sprayer equipment in agriculture is to apply chemicals on crops, making it essential for pest and weed management as well as nutrient application in the form of foliar feeds and fungicides. Sprayers are designed to distribute liquid solutions evenly across large areas, allowing farmers to protect their crops from diseases and infestations while ensuring optimal growth conditions. Understanding this role is crucial for effective crop management, as pests and diseases can drastically impact yield and quality. Additionally, when combined with precision agriculture techniques, sprayers can enhance efficiency by targeting specific areas of fields that need treatment rather than applying chemicals uniformly. This not only conserves resources but also minimizes environmental impacts. While fertilizing soil, harvesting crops, and planting seeds are important agricultural practices, they do not involve the specific application of chemicals that sprayers are designed for, which distinguishes sprayers as vital tools in crop protection and management.

2. What defines a Tractor in agricultural use?

A. A vehicle used for transporting crops

B. A motor vehicle with large rear wheels for hauling equipment

C. A device for planting seeds

D. A machine for processing produce

A tractor in agricultural use is specifically characterized as a motor vehicle designed with large rear wheels that allows it to haul equipment effectively. This unique design enables tractors to provide the necessary power and traction for various farming tasks, such as plowing, tilling, and pulling attachments like plows, harrows, and seeders. The emphasis on large rear wheels is significant because it enhances the tractor's ability to navigate rough terrain and maintain stability while performing heavy-duty tasks. Additionally, tractors often have a powerful engine that is capable of driving multiple types of agricultural equipment, making them essential for farm operations. In contrast, the other options describe different aspects of agricultural machinery or vehicles. For example, while transporting crops is an important function in agriculture, the vehicle specifically meant for that is generally a truck or a combine harvester. Similarly, planting seeds involves seed drills or planters rather than a tractor itself, and processing produce is typically handled by machines designed for that specific purpose, such as food processors or harvesters. Therefore, the defining characteristics of a tractor as a powerful, multi-functional vehicle designed for pulling and powering various agricultural equipment distinguish it from other agricultural machinery.

3. Iron chlorosis in plants is characterized by what visible symptom?

A. Leaf curling

B. Yellowing of plant leaves

C. Root decay

D. Excessive leaf growth

Iron chlorosis is a condition that occurs when plants are unable to uptake sufficient iron from the soil, often due to high pH levels or other environmental factors. The most prominent visible symptom of this issue is the yellowing of plant leaves, particularly the younger leaves, while the veins tend to remain green. This phenomenon is a result of chlorophyll production being inhibited due to the lack of iron, which is crucial for this process. The yellowing is often referred to as interveinal chlorosis, where the areas between the veins turn yellow while the veins themselves remain unaffected. This symptom is critical for identifying iron deficiency in plants and understanding its impact on overall plant health and growth.

SAMPLE

4. What does the term "banding" refer to in agronomy?

A. Applying fertilizers broadcast across the field

B. Applying fertilizers in a narrow, concentrated band

C. Applying fertilizers mixed with soil

D. Applying fertilizers as a foliar spray

The term "banding" in agronomy refers to the practice of applying fertilizers in a narrow, concentrated band. This method allows for targeted placement of nutrients, which can enhance nutrient availability to plants while minimizing losses due to leaching or volatilization. Banding is particularly effective because it places the fertilizer close to the root zone where it can be readily absorbed by the plants, improving efficiency and potentially reducing the overall amount of fertilizer needed. This practice also aids in reducing weed competition in the areas where fertilizer is applied, as the rest of the field remains unaffected. In contrast to broadcasting, which spreads nutrients evenly across a larger area, or other application methods like mixing with soil or foliar spraying, banding's focused approach can lead to more effective nutrient uptake and improved crop yields.

5. What economic impact is commonly associated with the Tomato Hornworm larva?

A. Destruction of roots

B. Destruction of vegetative parts

C. Destruction of soil

D. Destruction of seeds

The Tomato Hornworm larva is known for its significant economic impact primarily due to the destruction it causes to the vegetative parts of plants, particularly tomato plants, which it feeds on. This pest is notorious for its voracious appetite, targeting leaves, stems, and even flowers, ultimately leading to reduced plant health and yield. When these larvae consume large quantities of foliage, they can weaken the plant and make it more susceptible to diseases and other pests. The destruction of vegetative parts is critical as it directly correlates with the plant's ability to photosynthesize and grow. In agricultural contexts, the loss of these parts can lead to diminished crop yields, increased costs for farmers in terms of pest management and potential replanting, and overall economic losses within the agricultural sector. This impact highlights the importance of pest management strategies to mitigate loss and sustain agricultural productivity. Understanding this relationship allows farmers and agronomists to develop targeted pest management strategies to protect their crops and minimize economic losses effectively.

SAMPLE

6. How many pounds of phosphorus per acre will you add if you apply 40 pounds of diammonium phosphate per acre?

A. 15.0 pounds

B. 18.4 pounds

C. 20.4 pounds

D. 25.0 pounds

When applying diammonium phosphate (DAP), it is important to understand its composition. DAP typically contains approximately 18% phosphorus (P) in the form of P2O5, which is the method of reporting phosphorus content in fertilizers. To determine how many pounds of phosphorus you would add per acre when applying 40 pounds of DAP, you would calculate it as follows: 1. Calculate the phosphorus content: 40 pounds of DAP multiplied by the percentage of phosphorus (0.184 for 18.4%). \[40 \text{ lbs DAP} \times 0.184 = 7.36 \text{ lbs P} \] However, it's important to know that this percentage is based on the total phosphate (P2O5), and to convert this into elemental phosphorus (P), you need to multiply by a factor that considers that P2O5 has a molecular weight of about 142 and elemental phosphorus (P) has a molecular weight of about 31. The conversion factor is approximately 0.44 (which represents the ratio of molecular weights of phosphorus to P2O5). Thus, if you were calculating the total phosphorus contribution from DAP: -

7. What is a primary characteristic of stalk rots in corn?

A. Yellowing of leaves

B. Dark brown lesions on nodes

C. Complete loss of roots

D. Fungal growth on the ears

A primary characteristic of stalk rots in corn is the presence of dark brown lesions on the nodes. These lesions are indicative of the disease as they develop on the stalks, which can weaken plant integrity and ultimately lead to lodging. As the disease progresses, it compromises the plant's ability to transport nutrients and water, affecting overall plant health and yield. In contrast, the yellowing of leaves is more commonly associated with nutrient deficiencies or viral infections rather than specifically identifying stalk rots. Complete loss of roots is not typical of stalk rots since these diseases primarily affect the stem rather than the root system. Fungal growth on the ears may relate to other corn diseases, such as ear rot, but it does not specifically characterize stalk rot. Thus, the identification of dark brown lesions on the nodes serves as a distinct and defining sign of stalk rots in corn.

SAMPLE

8. What distinguishes indeterminate plants from determinate plants in terms of seed maturation?

A. Seeds mature at different times

B. All seeds mature simultaneously

C. Only some seeds mature

D. Seeds drop at the same time

Indeterminate plants are characterized by their growth habit, which allows for continuous flowering and fruiting over a longer period. As a result, in indeterminate plants, the seeds mature at different times throughout the growing season. This staggered maturation can be advantageous because it allows the plant to produce seeds over an extended timeframe rather than all at once. In contrast, determinate plants typically complete their growth cycle in a shorter time frame, leading to a more simultaneous maturation of seeds. This can result in all seeds ripening and being ready for harvest at the same time, which is different from the indeterminate growth pattern. The distinction of indeterminate plants maturing seeds at different times reflects their ability to adapt to environmental factors, optimize reproduction, and potentially increase yield through prolonged harvest windows.

9. What is the guaranteed analysis for disammonium phosphate?

A. 20-10-10

B. 0-0-60

C. 18-46-0

D. 10-30-10

Disammonium phosphate (DAP) is recognized for its high phosphorus and nitrogen content, making it a popular fertilizer in agriculture. The guaranteed analysis refers to the concentration of primary nutrients within the fertilizer, typically expressed in the N-P-K format, where N stands for nitrogen, P for phosphorus (in the form of P2O5), and K for potassium (in the form of K2O). In the case of disammonium phosphate, the composition includes about 18% nitrogen and 46% phosphorus, with no potassium content. This is reflected in the analysis of 18-46-0. The nitrogen component is essential for plant growth, contributing to vegetative growth and could be particularly beneficial during the early growth stages of crops. The phosphorus component promotes root development and flowering, thus supporting overall plant health and productivity. The other options provided do not correctly characterize disammonium phosphate. Safe to say, option C accurately captures the nitrogen and phosphorus proportions indicative of this fertilizer type, confirming its position as a vital resource for agronomic practices.

SAMPLE

10. What visual characteristic is associated with root rot?

A. Plants growing excessively

B. Dead and decayed roots

C. Bright green foliage

D. Large flower blooms

The presence of dead and decayed roots is a key visual characteristic associated with root rot. Root rot is primarily caused by pathogens such as fungi or bacteria that thrive in overly wet or poorly drained soil conditions. These pathogens attack the plant's root system, leading to tissue breakdown and decay. As a result, affected roots often appear black, mushy, or discolored, signaling that they are no longer able to effectively transport water and nutrients to the plant. Consequently, the health of the entire plant deteriorates, which may also manifest as stunted growth or yellowing of the leaves due to inadequate nutrient uptake. Recognizing these signs is crucial for identifying and addressing root rot early to save the plant. In contrast, options like plants growing excessively, bright green foliage, or large flower blooms do not align with the symptoms of root rot and indicate robust plant health rather than decay. Excessively growing plants typically exhibit healthy roots, while vibrant foliage and abundant blooms suggest that the roots are functioning effectively and the plant is well-nourished.

SAMPLE

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://ffa-agronomy-cde.examzify.com

We wish you the very best on your exam journey. You've got this!

SAMPLE